

QUA·RAE

QUA - Here is news of * * * RAE - Radio Association of Erie

Issue No. 5

December , 1969

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K3AFO

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868-2220

Material for our next issue
must reach your Editor no
later than January 1, 1970
All news contributions are
welcomed by the QUA-RAE.

ERIE METROPOLITAN VHF SOCIETY
TRI-STATE EMERGENCY NET
LAKE ERIE EMERGENCY NET
GENERAL ELECTRIC ARS
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QUA-RAE DECEMBER FEATURES

HAM OF THE MONTH
DXING
ACTIVITIES
SALE SWAP BUY
STRAYS
XMTR HUNT
RAE MINUTES
FCC ENGINEERS VISIT
ERIE HAM BANQUET
10 METERS
VHF
PROPAGATION
RAE MEMBER LIST
RAT PATROL
SUMMING IT UP
160 METERS

MERRY CHRISTMAS FROM THE QUA-RAE STAFF AND A VERY HAPPY NEW YEAR !!!

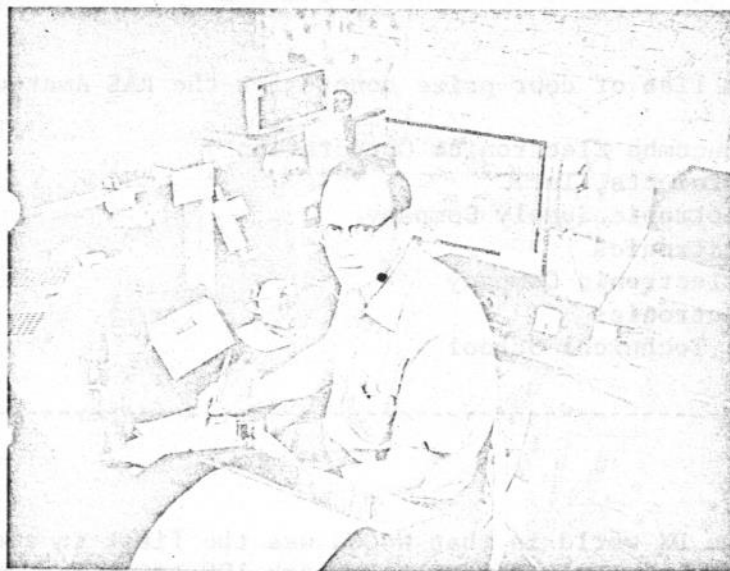


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MACE WISHES ALL THE AMATEUR RADIO HAMS
IN THE ERIE AND TRI-STATE AREA A VERY
PROSPEROUS NEW YEAR AND GOOD DXING !!



WA3HDK, Bob Bair

Ham of the Month de K3HSM

The QUA-RAE staff this month is giving its plaudits to WA3HDK, Robert E. Bair. Bob is located on Station Road, in a high-flat section of Erie County. In an effort to cope with his burgeoning ham station, Bob has constructed an annex on his mobile home, a portion of which is earmarked for station equipment expansion. By this Spring, Bob plans on having two seven foot racks filled with station equipment and a desk type console and master control position for selection of antenna and any one of four rigs. The equipment that Bob now has in his over-crowded shack includes: Main receiver - Super Pro - SP-600, back-up Lafayette KT-320, transmitter - DX-100, G-76 XCVR, and a 20A working into a homebrew linear using a pair of 6883's. For teletype, Bob uses a model 15 terminal and a homebrew AFSK unit.

Bob's main interest is participating in MARS activities where he puts in a major share of his operating time. During the month of November alone, WA3HDK handled 55 messages, the majority of which originated in Vietnam, Okinawa, Germany and even a few from the Pentagon. Bob can be heard on 4030KHZ from 4-5 pm daily and on the basic Pa MARS frequency 3,245 KHZ from 5-6 pm. For those who might have an interest in MARS activities, Bob will be giving a talk on the subject at the RAE February activities meeting. As for Bob's extra-curricular amateur activities, he is now a member of the Board of Directors, past Secretary of the RAE and is presently the Secretary of the VHF Society.

The QUA-RAE is thankful for having active hams like Bob in the area and acknowledge him for his willingness to assist in local activities.

The following is a list of door prize donors for the RAE Amateur Radio Banquet:

J. V. Duncombe Electronics Corporation
 Mini - Products, Inc.
 Erie Electronic Supply Company
 Swan Electronics
 Jordan Electronic Company
 Mace Electronics
 A.T.E.S. Technical School

DXing de K3AFO

1. Big news in the DX world is that W4QCW was the first to receive the 5band DXCC trophy. It took him only 3 months to work 100 countries on each of the 5 bands (80 thru 10). Reason it took so long for the award is because it took 10 months to get all the QSL cards!
2. C21JW, Nauru Island, is now an independant country. That's why Geneva assigned this prefix (C21). It is no longer Australian territory.
3. XF4 expedition rescheduled for December 16 (no ship available).
4. Look for Cocos Island (Ti9) January 25 or 26, 1970.
5. Zal from Poona, India has been using VUØDK, VU2DK and VU2DKZ. QSL via direct, no bureau. It works, I received his card in 3 weeks! (Box 104, Poona, India)
6. KC6JC, Eastern Carolines, skeds his QSL manager W2RDD every Mon/Wed/Fri at 1730 EST on 28.550 MHZ.
7. The Kermadecs, ZM1AAT/K heard well in Erie on the low ends of 10 and 15 CW in the evenings.
8. DX Strays:

W3BBO W3TPW W3BRB K3AFO WA3DJT W3FVH K3VLP W3WDK K3TUP K3PLV	received his YA2 QSL (Afghanistan). reports his first TF2 QSO on 10 meter AM searching for KC6BW on 10 meter SSB latched on to the Kure Island Expedition worked 13 Russian QSO's in a row on 10 meter AM proudly displays his 9V1 (Singapore) QSL. threatens local DXers with his new quad antenna. skeds Guam regularly to speak with his son enjoys DX chasing in the CW mode searches out the DX on 15 meters.
---	---
9. A DXer has to voluntarily submit himself to horrendous pile -- ups and be able to hear the rare one within the cacophony of humming angry bees, whines of a thousand circular saws, heterodyne effects, gasps of dying hippopotami, etc.
10. For the low frequency DXers -- don't forget the CQ WW DX 160 meter contest January 24 - 25, 1970.

KEY ELECTRONICS PRE-INVENTORY CHRISTMAS CLEARANCE

Although we basically don't handle specialized Ham items

Key has clearance specials on many experimenter type products. Come in now and SAVE. Some of our right now specials are::

Large assortment of various values of volume controls, regular 84¢ each and up, now yours for only 29¢ each.

Limited odds and ends of CB antennas, now 50% off regular wholesale price.

Telephone handsets, complete with units, used, \$ 2.00 each

Large assortment of can type condensers,	
singles	39¢ each
duals	49¢ each
triples	59¢ each
quads	69¢ each

PLUS, buy ten assorted and get your choice of 1 FREE

Erie's largest assortment of mikes, as very good discount prices to everybody.

Special prices on left over ranges of Simpson Meters, regularly priced at \$ 10.00 to \$ 15.00, now yours from

our existing stock at only \$ 4.95

RCA Antenna Rotors, regularly \$ 29.95 to stocking dealers, now special Ham priced at only \$ 27.00. Be sure to ask for this special, as its tagged at \$ 29.95, you have to mention this add for your savings on this one.

Remember, Key Electronics also has a wide assortment of electronic items for the non-ham members of the family. Key has tape recorders, radios, am, fm, fm stereo, portables, consoles, color tv sets, tv antennas, black and white tv sets, just about anything you want in electronics. Come in and look around, we service what we sell, but ask about special ham prices on larger items, on a cash and carry - service it yourself basis, for even greater savings.

And, last but not least, all of us wish you a very Merry Christmas and a Happy and Prosperous New Year !

Key Electronics and Jordan Electronic Co., at the corner of 12th & German Sts, Phone 456-2983, owned by Bob Jordan, W3KZU

CALENDAR OF EVENTS

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
DEC 7	8	9	10	11	12	13
14	15	16	17	18 RAE MTG GEN TEL BLDG LASER DEMOS. APOLLO 11 FILM	19	20
21 XMITTER HUNT	22	23	24	25 XMAS	26	27
28	29	30	31 NEW YEARS EVE	1 NEW YEARS DAY NO MTG	JAN 2	3
4	5	6	7	8	9	10 VHF SWEEP STAKES
11 VHF SWEEP STAKES	12	13	14	15 RAG BUSINESS MEETING	16	17
18	19	20	21	22	23	1600HR DX CONTEST 24

Activities de K3HSM

"Upcoming RAE Spectacular (Dec. 18, 8:00 P.M.)"

They said it couldn't be done but ---- the RAE, with the help of K3AFO, has lined up another "Spectacular". The December 18th meeting will be held in the conference room of the new General Telephone State Headquarters building at 10th and Sassafrass. The meeting will feature Mr. Ray Fitzgerald and Mr. Ray Delo of Gen Tel who will present a talk and live demonstration of a laser communication system (including a short laser film). Also on the agenda will be an exclusive color film entitled: "The Eagle Has Landed" which has been put out by NASA and depicts the most historical and scientific milestone in man's existence - the flight of Apollo 11. All Amateur radio operators in the Tri-state area (YL's and XYL's also invited) should not miss this one!

Meeting time will be 8:00 p.m., coffee and do-nuts will be provided - courtesy of Gen Tel and after the meeting all members are invited to participate in an informal party - details to be announced at the December 18th meeting. Parking will be available in the Gen Tel lot and guests are asked to use the 9th Street entrance and please sign-in at the door. A door prize will be raffled off (Tymeter 24 hour "ham" clock).

Activities (Cont'd)

There will be no activities meeting in January because the normal business meeting coincides with January 1 and it is advisable to stay away from any gavel pounding on that date.

The third Thursday of January, the 15th, will be a business meeting and the agenda of this meeting will include a review of the goals of the club for the year 1970 (meeting place to be announced)

Don't forget December 18th! Gen Tel New Headquarters Bldg. (10th and Sassafrass)

1. Live Laser Display (including short laser film)
2. Exclusive official government color films on Appollo 11
3. Amateur Radio Clock given away
4. Informal Xmas Party (807's provided), location to be announced.

Parking in Gen Tel Lot (chains will be dropped) lot opened at 7:30, use 9th Street entrance, coffee and do-nuts provided courtesy of Gen Tel

The calls listed below, are paid members of the R.A.E. for the year 1970. If your call does not appear, it is time you get your dues in (\$1.50) for the new year. If you are paid up for 1970 and your call does not appear, contact your Club Secretary, W3BRB 868-1217. (This list compiled as of 12/4/69)

K3AER	WA3JFV	W3PJD
K3AFO	WN3JIS	K3QHO
W3ALD	W8JIV	K3QIP
W3AQY	W3JIW	W3QON
K3AXS	WA3KFX	W3RLJ
WA3BBV	WA3KKT	W3SLC
W3BRB	W3KPJ	W3SN
WA3BVI	K3LIG	W3STK
W3BVM	WN3LKR	K3TUP
WA3COO	K3LQN	Emmanuel Tzouanakis
W8DLW	WN3MAU	K3UIK
WA3FFD	WN3MFL	W3VHP
WA3GIV	W3MJV	K3VLP
WA3GMN	WN3MKA	K3VXE
WA3GSH	WN3MTS	W3WDK
WA3HDK	WA3NGC	
WA3HGJ	W3NGI	
WA3HRH	W3NKK	
WA3HRJ	K3OSU	
K3HSM	K3PAJ	
WA3HSR	K3PCI	
W7IKZ	W3PIX	
WA3IOG	W3PIY	
WA3JAT	K3PLV	

SSB (Sale, Swap or Buy) de K3AFO

1. The McDowell High Radio Club is looking for a SSB transceiver, if you have one to sell, contact WA3KMF, Dennis Brooks, 833-0344.
 2. W3LOS, Leo Weiner, 138 Chautauqua Blvd. Erie, Pa. 16511 (Phone 521-1331) announces the following:

For Free - QST, 1958 thru 1963, Some years complete others have 1 or 2 issues missing. They are there for the asking! Contact Leo!
 3. For Sale: Ameco 6 and 2 meter xmtr. Contact WA3HCR 725-9126
 4. For Sale: 5 element Telerelex 10 meter beam, worked 180 countries on it in less than 2 years! A steal at \$39.00! (Cost over \$100.00 new). Halli-crafters 18 tube all band communications receiver; covers AM, SW and FM frequencies; needs some work, \$20.00. Contact K3AFO, 868-2220 or 871-2388.
 4. Will Sell or Trade (for goodies) --
 - a) transformer (750 watts) 3,000 V CT (1500-0-1500) at 250 MA
 - b) 4 - 866 (A) MV rectifiers
 - c) 2 - 866 Sockets
 - d) 1 - .012 MFD at 25,000 V vacuum cap
 - e) 1 - 5 VAC at 16A fil. transformer
 - f) 2 - 866 plate caps
 - g) 1 - 15K bleeder at 200 watts
 - h) 2 - jewel (large) pilot lamps (with bulbs) red and green
 - i) 2 - large porcelain case by pass caps.

Everything must go, take transformer and get the rest! Phone after 6 PM, 455-0034
 6. George Starry, 612 James ST. Latrobe, Pa. 15650 is searching for the following equipment:
 - a) Oscillation transformers such as the hinged type or pancake type.
 - b) Receivers such as -- "Pilot Wasp", early National Receivers, "Paragon" and "AtwaterKent" breadboard (either the regenerative or tuned radio frequency models)

George received a copy of the Amateur Radio Feature article in the Sunday Times News and made the above requests to the RAE. George is a "Radio Historian" and is searching for gear of yesteryear.
 7. Looking for used gear to build a Novice Station

 any low power rig and inexpensive receiver wanted (to tune Novice Bands)
 -- wanted before Xmas, Call ASAP 868-2220 or 871-2388
-

Strays de K3AFO

- W3SN Bart Geer, busy with code and theory classes at the YMCA.
- W3LOS Leo Weiner is Net Manager for the WPA Traffic Net.
- K3VXE Ron Jacobowski master minding a campus radio station at Gannon College.
- W2BLR John Reiser, FCC Engineer District #20, was guest of honor and featured speaker at the Nov 6th RAE meeting.
- K3TUP John Kanzius, Chief Engineer at WJET, is busy working on WJET's new 50 KW sister station WEEP in Pittsburgh. John is designing and engineering everything from the ground up!
- W3WDK Robbie Weaver, the proud owner of a new SWAN rig. Robbie recently constructed a new rhombic antenna.
- W3TLA Andy Payer spends his evenings working at the ADT signal office.
- W3WBA Willie Manola spends three evenings a week assembling antennas at the "Mini-Products Co."
- K3KRA Gary Kostek; It was "Be Kind to Gary Kostek Day" on WJET radio, November 14, 1969.
- WA3GSH Barry Capell is promoting a little 160 meter activity in the Erie area. Barry says he wishes he had enough room for a 160 meter rhombic!
- WN3LKR Brad Robertson was recently in an automobile accident. We're all glad he was not seriously injured.
- WA3HSR Mike Hall is looking forward to Thanksgiving and Christmas break so he can work a little DX on 10 meters.
- K3AFO John Yokoff was the WWGO citizen of the day on November 19, 1969.
- K3PLV Craig Hill is finally recovering after the Forest County Expedition. He operated the equipment along with K3VLP and WA3HSR. Craig is also active now as a 10 meter mobile.
- W3KPJ Hank Schneider giving AREC a big shot in the arm in N.W. Pa. Hank has also been helping the QUA-RAE Staff. Keep up the good work Hank!
- WA3COS Dave Miller has completed his HW-100 and hopes to have the SWAN dial modification on it by Christmas break. (from college)
- W3KKJ George Markiewicz planning to put up a thunderbird 6 element beam soon.
- WA3GMV McDowell Radio Club looking for a SSB transceiver. The club now sports several DX confirmations earned last year.
- W8PO Eldon Heck is swapping the "Inter-City Radio Club News Bulletin" (Mansfield, Ohio) with the QUA-RAE every month.
- W3-SWL George Younkin spends Thursday evenings at the YMCA Code Classes working toward his ham ticket. George says he can't wait to turn on that KW!

Strays (Cont'd)

- WA3DJT Jack Baer is proudly displaying his WML trophy for 1st place (below 50 MHZ) in the Worked the Most Locals Contest.
- WA3JFK Lt. Col Bill Runser (Retired) was one of the furthest visitors to the Erie Amateur Radio Banquet. Bill arrived from Glenshaw, Pennsylvania (near Pittsburgh).
- K3VLP George Dickey; George's XYL (Kathy) has returned home from the hospital after a recent operation. We all wish her speedy recovery.
- WB2NYM Augie Weiss (Schenectady, N.Y.) has made 600 warm contacts to the South Pole for persons in the Albany, N.Y. area. He was presented a special citation by the Albany Mayor (Erastus Corning). Augie is employed by General Electric.
- K3PAJ Frank Schubeck is Net Manager for the 10 meter Lake Erie Emergency Net which meets every Sunday, 2000 EST, 29.150 MHZ. Frank is also keeping busy with his teletype machine.
- W3DKL John Pinar, heard smoking the airwaves on 10 meter A.M.
- W3LKH James Waldermarson, plans to get the cob-webs out of the AM gear. Jim attended the Amateur Radio Banquet with his XYL and son who recently returned from Hawaii (on leave).
- W3KFH Harry Albert; QUA-RAE welcomes Harry as a new reader from the Butler, Pennsylvania area.
- W3PIX Dick Shreve can be heard chasing the DX (in Erie) on 10 meters with a little 2 watt AM rig.
- W3BRB John Gebler is leaving for Moscow on December 19. John and XYL plan to throw snow balls in Red Square on Christmas Eve!
- DON'T FORGET THE BIG RAE MEETING ON DECEMBER 18, 1969!!

More Strays.....

- W3CUV Neal Argeny enjoys reading QUA-RAE but due to recently moving to a new QTH (1711 W. 15 St.) is not too active yet.
- WA3HJC Wayne L. Robinson ("Lee") is in the Navy and would like to receive mail from friends. Drop Lee a line to:
 Wayne L. Robinson SRB468214
 Company 662
 Recruit Training Command
 Great Lakes, Ill. 60088
- W3BVM Chuck Kader has just completed putting up a new crank up tilt over tower with nothing less than a TH-6 6 element tri-bander! Chuck is a DX chaser preferring 10 meters.

R. A. E. Minutes de W3BRB

The meeting was called to order by the Vice President K3HSM at 8:20. The minutes of the October 17 meeting were read and approved. The treasurer's report was given by WN3MAU. Joe reported that all bills were paid and the new balance was \$515.65.

Under old business W3BRB gave a Hamfest report. It was reported that 122 people had attended. K3AFO gave a newsletter status report. John reported that a cut was going to be made of those receiving the newsletter. (Join the RAE or donate to the QUA RAE so you won't miss one exciting issue of the QUA RAE). John also reported that the Newsletter will carry some advertising. The upcoming auction was discussed. WA3GJH was appointed chairman of the auction. The property report was given by WA3GIV. Fred reported that the C.D. had authorized money for repairs on the Comm. truck for inspection. Fred also reported that the truck would be re-lettered soon.

Under new business, the Sunday evening transmitter hunts were discussed. A committee was set up to coordinate the 6 and 10 meter hunts. WA3GIV and K3OSU will head the committee. Letters received by the club as a result of the newspaper article were read by W3BRB. He reported that all requests for traffic for local people are being taken care of. WA3HDK made a motion that no raffle tickets be sold at club meetings. The motion was seconded by WA3GIV. A vote was taken and the motion was denied. WA3DJT thanked the club for his W.M.L. Award. WA3GJH made a motion that the club support the newsletter for one year. It was seconded by K3OSU and carried. WA3HSR reminded the club members that the part two F.C.C. license program starts November 22. WA3GIV made a motion for adjournment, it was seconded by WA3HRJ and carried.

I would like to take this chance to wish all those reading the Newsletter the best of holiday wishes. Your secretary will be spending the Christmas season in the Soviet Union on an educational tour. With a little luck I will return on January 4, 1970. I am going to make a special effort to visit Box 88 Moscow to see for myself just what the USSR QSL bureau looks like.

I hope the man in the Red suit brings all of you just the piece of gear you have been looking for.

73's and 58 (look it up)

DE W3BRB

A Friendly Visit by the F.C.C. de W3BRB

To most of us, the FCC is a large impersonal government organization that only gives exams and issues violation notices. This stereo-type was exploded at the November 6 meeting of the Radio Association of Erie, held at the City Hall in downtown Erie. Mr. John Reiser the District Engineer for the 20th district took time out of his busy schedule to speak to club members and interested persons. Mr. Reiser is an active amateur with the call W2BLR and he knows the problems and frustrations faced by the average ham.

His talk consisted of two parts. The first being a general discussion of the work done by his office. During his talk he explained that the FCC carries through on all letters received. He read some of the letters his office has received concerning TV interference. These letters proved to be very humorous. The second

Visit by the F.C.C. (Cont'd)

part of the program was a question and answer period. Questions ranging from the use of RTTY to incentive licensing were discussed. The meeting was then adjourned for coffee and rag chewing.

To those of you that were not able to attend, you missed one of the most informative meetings the RAE has held in a long time. The staff of the QUA RAE and the Radio Association of Erie would like to thank Mr. Reiser for coming to Erie to give the talk. A special thanks should go to John Kanzius, K3TUP for his efforts in making Mr. Reiser's visit possible. We hope that Mr. Reiser may again be able to speak to our club.

Helpful Hints (Hi, Hi)

Trifle thee not with radioactive tubes and substances least thou commence to glow in the dark like a lightning bug and cause thy wife to be frustrated nightly and have no further use for thee except for thy wages.

Flash de W3GV!!

22 years ago This was the front page squabble in radio circles -- "New 2 meter DX record was claimed by W0WJZ in Iowa and W3GV in Erie, Pa! Their contact was 26.375 miles further than the previous record. Their DX record (in the year 1947) covered exactly 675 miles!

FCC Reports Citizens Band Radio Decreasing FCC figures indicates that not only has CB radio stopped its rapid growth, but is static and possibly decreasing. With only 20% of licensees renewing, there must be a lot of used CB gear around somewhere (ready to convert to 10 meter A.M.!).

Field Day Results 1969, W3GV

W3GV scored 53rd Of 222 in the "three xmtr operating class". Its final score was 6,444 points as compared to the first place score in this class, W5WMU/5 with 25,498 points. The station that came in number 222 scored 396 points. W3GV was in the top 25% of its class. How about next year #1!

How Come Department?

How come the other fellow calls longer than I do?

How come the mic gains are increased when the "rare one" comes on?

HAM A generic nickname for a Radio Amateur; a person who has a gnawing interest in things communicative and has acquired cauliflower ears from too tight headphones or can understand every word of a Donald Duck cartoon the first time (de W7RGL).

ATTENTION:

PIANO TUNING AND REPAIR

ALL MAKES

CALL ROBERT W. WAIDLEY

833-9059

GET THAT PIANO TUNED FOR THE HOLIDAYS !!!

ROBERT WAIDLEY WOULD LIKE

TO PASS ALONG HIS BEST 73'S

AND SEASON'S GREETINGS TO

ALL THE RADIO "HAMS" IN THE

TRI-STATE AREA AND REMEMBER

THAT IF YOU OR YOUR FRIENDS

PIANO HITS THAT SOUR NOTE, ITS

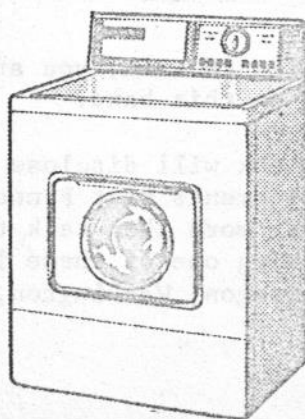
TIME TO CALL 833-9059

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SIDE-LOADERS TOP-LOADERS
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\$1⁸⁸

STUDIO LAUNDROMAT

438 - 440 W. 18th ST.

8 LBS. DRY CLEANING

\$1⁸⁸

UPON PRESENTATION OF
THIS COUPON

News from the TOP BAND de WA3GSH

In case you haven't bothered to tune down to the 160-meter band in the past few years, you may be in for a surprise. The 160-meter band not only has activity but it is actually crowded! The first attempt at a receiver came by tuning the oscillator upward in a small broadcast receiver and replacing the antenna coil with a high-Q loopstick. Some tinkering finally resulted in receiving the ever present LORAN signals which are unmistakable on this band. Several evenings were spent in tuning the band and studying the activity. While there was quite a bit of noise to be experienced on these low frequencies, there was also a lot of CW and phone activity. Due to breakthrough problems with the local standard broadcast stations on the simple receiver, a new and more sophisticated receiver was built to more accurately study band activity. With the recent completion of this receiver, it has been a surprising experience at the amount of 160-meter activity. During the evening hours it is not unusual to hear stations from the Midwest. All listening was done between 6:30 and 10:00 PM. Receiving antenna was a 135 foot long wire bent in an L configuration. Performance was enhanced by use of a preselector ahead of the receiver. This preselector provides the difference between marginal signals and S9+ signals.

Activity on 160 is workable mostly during darkness. Anytime after dark the band opens up and continues to improve with the lateness of the hour. Noise is bothersome on this band to say the least but it is possible to achieve many good contacts despite its presence. Here in Pennsylvania, we are permitted to work the 1800 to 1825 kc and 1825 to 1850 kc segments.

160 - meter Power Allocations

<u>1800 - 1825 kc</u>		<u>1825 - 1850 kc</u>	
<u>DAY</u>	<u>NIGHT</u>	<u>DAY</u>	<u>NIGHT</u>
200 W	50 W	100 W	25 W

Do not be misled into thinking that you cannot do anything with 25 watts on this band. In the past two weeks of listening, a great deal of conventional - AM has been heard with S9+ signals, running 25 watts, from as far as Maine and Iowa.

For you sideband buffs, there is quite a bit of SSB activity on 160. with the absence of commercial gear for this band, it is surprising at the amount of SSB activity.

There is also plenty of CW activity on 160 to attract the CW enthusiast. For you fellas who are a little rusty on your Morse, you will find a number of stations who send at speeds well below the 13 WPM level. There are also stations who move along at the 18 to 22WPM level.

Ragchewers are especially plentiful on 160. If you like to talk, you are in good form on 160. Plenty of lengthy discussions are heard on this band.

A study of the 160-meter allocation sheet in the Handbook will disclose that almost every state in the Union has at least one of the two segments that Pennsylvania is allowed to operate in. Hence, you will certainly do more than talk to your neighbor in New York or Ohio. Only several states are lacking one of these lower segments. Among these are California, Arizona, Nevada, Oregon, Washington, and Hawaii.

News from the Top Band (Cont'd)

Signal strengths, as has been mentioned previously, are quite good; however, are subject to rather slow fading. At times there is a total absence of fading and at other times a long-term fade is experienced. You may also notice occasional heavy selective fading which tends to distort the audio quality of a signal. All of these effects disappear and may not occur again for long periods. It should be noted that temperature plays an important role in the quality of 160 reception. Warm days are generally accompanied by higher atmospheric noise levels. These levels are nearly intolerable during the warmer months of the year. The condition is similar to that on 80-meters only more severe. During the colder months, the noise is drastically reduced and operation again becomes practical. The cold winter nights should prove for long distance work. Generally speaking, the colder the night the later the hour, the better the conditions for DX. It is at this time that atmospheric noise is at its lowest and signals that were once in the noise can now be heard.

Little has been said about the antenna problem on 160-meters. Without going into detail (see Handbook), nighttime work can be done with almost any random-length antenna that can be tuned to resonance for this band. These random horizontal antennas are not nearly as effective for daytime communication. Here verticals have the superiority. This arises chiefly due to the high percentage of ground-wave found in 160-meter radiation (that is, groundwave effects are predominant on these low frequencies).

If you would like the challenge of low-power CW or AM phone, you may want to investigate the possibilities of 160-meters. Take some time to tune down to 160. You may be in for a surprise. C U on 160.

10 Meters de K3AFO

1. When the 10 and 20 meter bands are open at the same time (MUF above 28MHZ), a signal on 10 meters is as much as four times stronger! The reason -- the ionospheric absorption on 28 MHZ is $\frac{1}{4}$ the intensity of 20 meters. It would require considerably more power on 20 meters to equal the strength of a 10 meter transmission over the same path. This accounts for the strong signals often possible on the 10 meter band when using relatively low power on A.M.
 2. Australis - Oscar 5, 10 meter satellite launch date will be announced via ARRL bulletin. For any late announcements, check with the 10 meter net on Sundays (29.150 MHZ) 2000 EST where all ARRL bulletins are read by W3BRB.
 3. New active 10 meter mobile station is K3PLV Craig Hill. Craig recently purchased a Lafayette HA410 10 meter AM transceiver.
 4. W3BRB busy running 10 meter patches to Okinawa for readers of the Amateur Radio Feature Article in the Sunday Times. Many requests for areas around the globe are being received at the RAE P.O. Box.
 5. 10 meter net check-ins are now on the increase averaging 20 to 25. Let's make it double that! Wendell Good K3ZGG is Net Control for December.
-

The RAE is being swamped with fone patch and radiogram requests as a result of the Sunday Times Newspaper feature article on ham radio. All requests are for overseas areas -- if you would like to assist in helping handle some of this holiday traffic, contact W3BRB, 868-1217 or K3AFO, 868-2220

New Net

A new net called the Western Pa Phone Net started operating at 0300 Z on 3955 on November 17, 1969. It meets daily at this time. Mode is primarily lower sideband but any emission allowed by the FCC can be used.

Voting Results for Atlantic Division Director (Effective Jan. 1, 1970)

*1)	Harry A. McConaghy	W3EPC	2,189
2)	Gilbert L. Crossley	W3YA	1,034
3)	George W. Hippisley, Jr.	K2KIR	846
4)	Henry A. Blodgett	W2UTH	698
5)	John F. Wojcikiewicz	W3GJY	322
6)	Paul D. Mercado	W3FBF	192

Vice Director

*1)	Nesse Bieberman	W3KT	2,086
2)	Harold C. Smith	WA2KND	1,311
3)	George S. VanDyke, Jr.	W3HK	1,028
4)	Allen R. Breiner	W3ZRQ	833

*declared winners

Mystery Ham (Appeared in Erie Times Newspaper)

Phone Call -- The parents of Navy P.O. 3rd David Dankworth were overjoyed to hear from their son via Ham Operator from aboard his ship -- destination unknown. In the excitement of speaking with his son, Mr. Dankworth failed to get the Ham Operators name or call letters and would like to let him know just how grateful they are. The Dankworth's live at 618 Chelsea Drive in Erie...

Come forth mysterious ham and let yourself be known!!

FCC Bulletin (District #20, Buffalo, N.Y.)

Effective January 1, 1970, the Amateur Operator Examination Schedule at the Buffalo, N.Y. office is being expanded. Amateur examinations will be given every Friday starting at 9:00 A.M. Commercial operator examinations will be given each Thursday at 9:00 A.M.

About VHF de WA3GSH
Emergency Coordinator, Erie County

Tri-State Emergency Net

Sunday evening activity on the 6 - meter net has continued with much the same participation as the last several months. Check-ins number in the low to mid 20's on the average. We have had several oldtimers check-in in the past few weeks that we have not heard for some time; K3BLX and K3HFL were recently heard checking into the net. It is nice to have these fellas back amongst the active 6 - meter boys. We hope that they will find time to participate in the net activities more often in the future.

With the advent of poor weather, it would be wise for net members to monitor the Tri-State Net frequency (50.52 Mc) as often as possible. In this way, we can be ready to assist in situations that may arise due to heavy snowfalls or other severe weather conditions. It is wise to be prepared for any incidents that could require the use of our communications facilities. Take special steps to scan the net frequency during heavy snowstorms such as we experienced on Friday evening, 11-14-69. As we have seen, these conditions can produce a number of local problems particularly with respect to traffic accidents. Awareness on our part can result in speedy relief whenever such action is called for.

PLAN TO PARTICIPATE WITH YOUR LOCAL AREC AND RACES ORGANIZATIONS!!

Your support will mean a strengthening of local EMERGENCY PREPAREDNESS.

Tri-State Emergency Net meets every Sunday Evening at 9:00 PM; 50.52 Mc.

Amateur Radio Emergency Corps. (AREC)

There has been an addition to the local emergency group with the arrival of Carl Rimmer, K3OSU. Carl has been appointed Assistant Emergency Coordinator with jurisdiction in the 6 - meter band. Carl will assist in strengthening local emergency capabilities and coordinating with local agencies to form a strong basis for emergency preparedness. It is hoped that Carl will receive the support of all of the local amateurs. This support will enable Carl to provide the kind of leadership that is necessary in the organization of our emergency group. We are very happy to have Carl on our team.

Rat Patrol Held on Halloween

October 31 is normally thought of as a night for ghosts and goblins to roam the streets. This Halloween saw an addition to the usual crew of goblins with the participation of the local 10-meter and 6-meter mobiles. The mobiles didn't exactly sport glowing Jack-O-Lanterns on their cartops, but they were equipped with long slender steel rods from which signals took flight like witches leaping onto their broomsticks and fleeing into the autumn night. From the results of the affair it seems safe to say that our gang of mobiles must have scared off most of the pranksters. Little difficulty was encountered as a result of the city-wide patrol. In at least a few instances the mobiles were instrumental in discouraging any type of malicious mischief. WA3HRJ managed to discourage a large group of young people who were frequenting a streetcorner near Frontier Park on west sixth street. Over-all participation on both 10-meters and 6-meters was extremely good, especially in view of the last-minute nature of the affair. A big round of applause to all who participated in the exercise.

Vets Parade de WA3GSH

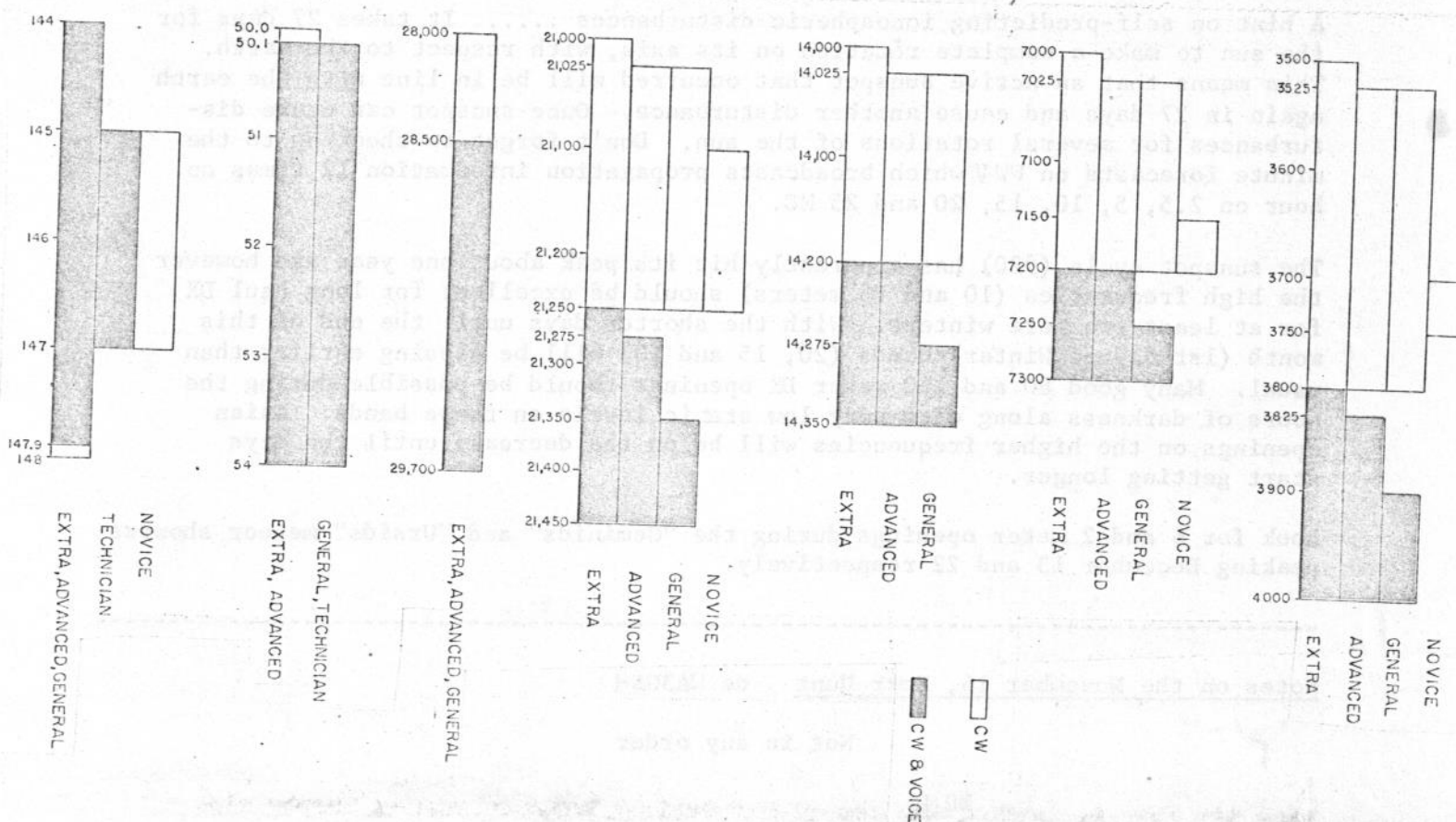
Tuesday, November 11, 1969 was Veterans Day. To observe this national holiday, the city of Erie held a parade down State St. The parade was held starting at 7:00 PM and included units from the police department and the local high school marching bands and other groups from the city. This year, the local amateurs were invited to participate in the parade by Police Chief Armand Chimenti. Four of our mobile units were planned to ride with the police segment of the parade. Since this notice was given to us scarcely a week before the day of the parade, quite a number of the local hams could not participate in this event. Nonetheless, it was possible to make amends at the last minute and were able to put three mobiles in the parade. These three mobiles were K3ATZ, K3OSU and WA3HRJ. K3VLP was to have driven the Comm truck to make the fourth unit but was held up at the last moment and had difficulty making the event. George tried to recoup his loss and by dint of a few amber lights (and even an occasional pink light), he managed to be at the parade site by 7:02. Despite the planning by W3JTF to place George further back in the parade, there was a snafu. Apparently only one or two of the parade marshalls were aware of the late preparation made by Larry Herman. Unfortunately, George bumped into a different group of parade marshalls and they knew nothing of these last-minute arrangements. Hence, K3VLP effectively hit a stone wall and was unable to drive in the parade. If events such as this are contemplated in the future, it may be wise to anticipate any request that may occur and be ready to act accordingly. There really was little that could be done with the situation due to the short notice.

As always happens, Murphy was on hand with his usual bag of tricks. This time Jim McCray, WA3HRJ, had the rather dubious honor of having Murphy ride shotgun as he drove in the parade. Murphy behaved himself until Jim was passing the Warner theatre at the brisk pace of 1 Mph. At this time, the strain on Murphy had reached the breaking point!. All at once Jim's car overheated and the engine quit. Fortunately, Jim managed to pull over to the side of the street as this was happening. After employing the proper phonetics Jim managed to get the engine going once again. In his haste to get back into the parade, he applied more than the normal amount of force to the gas pedal. The result was beautiful. Imagine the surprised look on the faces of K3OSU and K3ATZ as they peered into their rear-view mirrors and watched Jim lay rubber for a block and a half in the best exhibition of drag strip techniques seen at a local parade in years. When we last saw Jim McCray, he was still muttering something under his breath about some guy named Murphy.

The fellas enjoyed riding in the parade and didn't seem to mind driving through red lights as they proceeded down State St. A big round of applause to Larry Herman who made the arrangements for the mobiles who did ride in the parade and a special thanks to Carl Rimmer, K3OSU, who made a mad dash to the mall and also made some hasty signs to paste on the sides of the cars. Our thanks to Chuck Lewis for going out of his way in trying to get the Comm truck into the parade.

The Inter-City Radio Club (Mansfield, Ohio) featured Loren G. Windom, W8GZ, inventor of the famous Windom Antenna, at their November 7 "Old Timers" Night Meeting.

U.S. AMATEUR SUBALLOCATIONS EFFECTIVE NOVEMBER 22, 1969.



OFFICIAL BULLETIN NR 249 FROM ARRL:

FCC HAS ISSUED A SPECIAL XMAS CALL SIGN FOR THE FIRST TIME!!!
 WX3MAS WILL OPERATE IN THE XMAS CITY, BETHLEHEM, PA. FROM DEC 15
 TO JAN 1, ON ALL THE BANDS.

QUA-RAE EXCLUSIONS

RAE HAMFEST PHOTOGRAPHS WERE OMITTED FROM DEC ISSUE OF QUA-RAE BECAUSE OF POOR COPY REPRODUCTIONS. THEY WILL APPEAR IN POSSIBLE LATER ISSUES. THE PICTURES INCLUDED WA3DJT, W3TPW, WA3GSH (ALL THREE DISPLAYING THEIR WML AWARDS) GEN TELS DISPLAY, W3NXX'S DISPLAY AND OUR GUEST FROM GLENSHAW, PA. WA3JFK. RAT PATROL ARTICLE BY WA3GSH WAS ALSO OMITTED AND WILL APPEAR IN THE JAN. ISSUE OF QUA-RAE.

Propagation de K3AFO

A hint on self-predicting ionospheric disturbances It takes 27 days for the sun to make a complete rotation on its axis, with respect to the earth. This means that an active sunspot that occurred will be in line with the earth again in 27 days and cause another disturbance. Once sunspot can cause disturbances for several rotations of the sun. Don't forget to check up to the minute forecasts on WWV which broadcasts propagation information 12 times an hour on 2.5, 5, 10, 15, 20 and 25 MC.

The sunspot cycle (#20) has apparently hit its peak about one year ago however the high frequencies (10 and 15 meters) should be excellent for long haul DX for at least two more winters. With the shorter days until the end of this month (1st day of Winter) bands (20, 15 and 10) will be closing earlier than usual. Many good 80 and 160 meter DX openings should be possible during the hours of darkness along with very low static levels on these bands. Asian openings on the higher frequencies will be on the decrease until the days start getting longer.

Look for 6 and 2 meter openings during the "Geminids" and "Ursids" meteor showers peaking December 13 and 22 respectively.

Notes on the November 16, Xmtr Hunt de WA3GSH

Not in any order

10 M

*W3WDK
 WA3GIV
 K3PLV
 K3AFO
 W3YWL Hidden Xmtr

6 M

WA3JJT
 *WA3HRJ
 K3ATZ
 W3UCZ
 K3OSU Hidden Xmtr

Next Transmitter Hunt is December 21, 1969; At: 6:30 PM - Note the change in time!

W3UCZ and WA3GIV will be the Hidden Mobiles..... Weather Permitting!!

*Winners

RAE Banquet de K3HSM

A resounding note of Thank You. The RAE's annual Amateur Radio Banquet was a tremendous success due to the efforts of all those on the committee contributing their time, effort, ideas and enthusiasm. But the main reason for the success was the support that was received by the hams in the Erie Area. An enjoyable social evening was promised and most certainly was had by all.

Our fellow hams wasted no time in getting into the swing of things and although the bar was located in a remote corner of the Sunset Inn, it was quickly found by many of the hams who are noted for their astuteness, quick reflexes and thirst. W3PIX and W3FVH made certain that the bartender was kept busy and also very helpful and full of comments for those who happened by.

Banquet (Cont'd)

It was great to have a contingent of Doctors (W3YWL, W3KLD, K3AXS, W3VHP) on hand and fortunately their services were not required. Doc, W3YWL and Scotty W3STK provided help at the door signing up 18 new members to the Club.

The evening progressed smoothly as everyone renewed old acquaintances and started new ones. The eyeballs and highballs were both going at a good rate and there were plenty of things going on to fill in the time in between conversations. The General Telephone display was a success and W3NXX acquainted many of us with the Swan and Hammerlund gear he had on display. Jim Rose aptly ran the club equipment that was set-up portable for the occasion and W3PIX and W3FVH aided immeasurably with the "807" inspection and display booth.

The couple that traveled the greatest DX to come to our gala affair was WA3JFK, Bill Runser and his XYL (Glenshaw, Pa.). W3KFH, Harry and Betty Albert trekked in from Butler, Pa. and W3JIW and K3HHE mobiled from Conneaut Lake, Pa. W2UCZ represented Ashville, New York. Among those who attended that haven't been seen for awhile were: W3RLJ, W3PIV, W3DKL, W3HTD, WA3KKT, W3TMK, W3QN, W3LOS, W3NFR, W3MJV, K3UVN, W3LKH, and W3MED.

The buffet was excellent and the dinner music provided by Erie's Stephen Mioduszewski added just the right mood. John Glebler proved to be an excellent MC and Bob Chistester provided us with a good insight of educational TV and what its purpose is and he did it in a most entertaining and refreshing manner.

Hank Schneider sung the praise of the AREC and officially announced the appointment of Barry Capell, WA3GSH as EC for Erie County. The bronze plaques awarded to the winners of the WML contest were a prize that would be striking in any ham shack. The door prize drawing held a few surprises as one of the club officers won and old saying was proved worthy of being recorded in the archives of history. The Early Bird came up with quite a night crawler as Doc Cook, who was the first person to purchase tickets for the banquet, won the grand prize of a \$150 VTVM with ticket number 1! Two other early birds, W3PIX and W3FVH were also awarded for their astuteness in that FVH had sold his linear to three different people before 7:30 and PIX would never have been able to test so many 807's.

Many thanks again to all those who attended and also K3AFO, WA3HSR, W3YWL, W3BRB, K3VLP, WA3GSH, K3HSM, W3LKJ, WA3HRJ, WA3JAT, WA3FFD, W3STK, W3NXX and Bonnie Zaczyk without whose Herculean efforts the Hamquet would never have been such a Q5XS9 affair.

Summing it Up de K3AFO

We hope with the new year, that the Amateur Radio Fraternity in the Erie and Tri-State area will continue to grow and become stronger. This can be done only if everyone can contribute just a little to the ham cause. We hope that everyone who reads the QUA-RAE will make it a point to check into the local nets, take part in some of the emergency drills, become an active member of the Radio Assoc. of Erie or other area organizations and become a participator rather than just a bystander. It is too often that the bystanders are heard with the loudest critizism.

The QUA-RAE Staff will be expanded next issue with additions of WA3HSR, Mike Hall and K3PLV Craig Hill as assistant editors. We are planning bigger and better issues for the year 1970. Any suggestions for improving your Amateur Radio Bulletin would be appreciated by the staff. A Very Merry Christmas from K3AFO, W3BRB, K3HSM, WA3GSH and Miss Bonnie Zaczyk and the QUA-RAE Staff wishes everyone a Happy and Prosperous 1970!!

CU Next Year - 73'S and 58
Ur Editor, K3AFO

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